

**TIAMA**

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**OPTOELECTRONIC PROCESS AND DEVICE FOR  
INSPECTION OF AN AREA OF REVOLUTION OF A  
RECEPTACLE**

**ABSTRACT**

The invention concerns an optoelectronic process for inspection of an area of revolution (T) of a receptacle (3) presenting an axis of revolution (X), where the process includes the following stages:

- illumination of the surface to be inspected (T) using a lighting system (5) presenting an axis of revolution that is located in the extension of the axis of revolution (X) of the receptacle,
- formation of an image of the surface to be inspected using a camera, and analysis of the image formed with a view to checking the characteristics of the surface to be inspected.

According to the invention, the process consists of illuminating over at least three angular sectors, each emitting a given radiation spectrum that is separate from all the spectra of the other sectors, and forming an image for each angular sector of the surface to be inspected by selecting only the light rays returned by the surface to be inspected and presenting one of the said given radiation spectra, so as to eliminate the parasitic light rays whose radiation spectrum does not correspond to that selected for the said angular sector.

Figure for the abstract: figure 2